



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/932,652	09/18/97	SCHULTEN	019557.0121

WM61/0521
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EXAMINER
WAYNER, W

ART UNIT	PAPER NUMBER
3744	

DATE MAILED: 05/21/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/932,652

Applicant(s)

SCHOLTEN ET AL

Examiner

WILLIAM WAYNER

Group Art Unit

3744

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 3/8/99
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-6, 8, 15-20, 22, 29-34, 36, 43-78 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☒ Claim(s) 49-69 is/are allowed.
- ☒ Claim(s) 1, 3-5, 8, 15, 17-19, 22, 29, 31-33, 36, 43-48, 70-78 is/are rejected.
- ☒ Claim(s) 2, 6, 16, 20, 30, 34 is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of References Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 15, 18, 19, 29, 32, 43, 45, 46, 48, 70, 73 and 77 are rejected under 35

U.S.C. 103(a) as being unpatentable over Nurczyk, as applied in the last Office action in view of Heckenbach, Matsunaga and Ariam et al. Heckenbach shows a VAC unit in which a differential pressure sensor 29 is used in conjunction with control of air damper 17. Matsunaga in the prior art of Fig. 3, in Fig. 1 and Arima et al in the prior art of Figs. 3 and 4 and Fig. 1 all show the use of fuzzy logic for implementing fuzzy logic rules for generating signals to a controlled element such as valve controller 26 in Fig. 1 of Ariam et al. In order to provide a more detailed operative device it would have been obvious to provide plural pressure sensors as shown by Heckenbach and fuzzy logic as taught in Arima et al and Matsunaga.

Claims 3, 8, 17, 23, 31, 36 and 72 rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 and further in view of Tate et al as applied in the last Office action.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Claims 43-48, 71, 75, 76 and 78 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original disclosure does not support fuzzy logic control of liquid valves, hall effect circuitry (claim 75) and a shield for the flow sensor (claim 76).

The fact that some particular feature is well known, was obvious or could have been done are not determinative of the existence of new matter.

Claims 5, 33 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 and further in view of Official Notice. Official Notice is taken that it is well known to measure air flow by using a heated thermistor or an air turbine therefore in order to provide a more detailed disclosure it would have been obvious to so provide the primary reference.

Claims 2, 6, 16, 20, 30 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

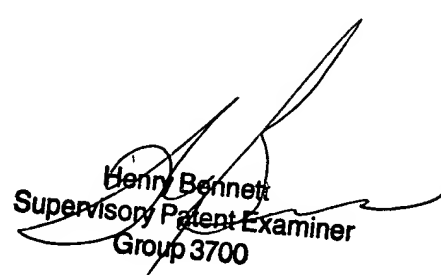
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The applicant's are requested to send a copy of page 3 of the Examiner's first Office action with the next response since the Office record is incomplete in this respect.

W. WAYNER:LM
MAY 19, 1999
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Henry Bennett
Supervisory Patent Examiner
Group 3700